

Claims

1. Polyurethane elastomers comprising the product of the reaction of

5           a) at least one diisocyanate and/or polyisocyanate with

              b) at least one polyester polyol having an OH number of 20 to 280 and a functionality of 1 to 3, and optionally with

10           c) one or more polyether polyol or polyether ester polyol each having an OH number of 10 to 149 and a functionality of 2 to 8, and optionally with

              d) one or more members selected from the group consisting of chain extenders having molecular weights lower than 800 and crosslinking agents with having OH numbers of 150 to 1870.

in the presence of

20           e) at least one amine catalyst,

              f) at least one esters of monobasic carboxylic acid or polybasic carboxylic acids, the (first) dissociation constant (pK) of which is 0.5 to 4, and optionally

25           g) a foaming agent, and optionally

              h) one or more conventional additives,

30           wherein the maximum ratio of the number of ester groups in said f) to the number of amino groups in e) is 1.0.

2. The polyurethane elastomer according to Claim 1 wherein said a) is a prepolymeric reaction product of 4,4'-diphenylmethane diisocyanate and polyester polyol.

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3. A molded article comprising the polyurethane elastomers according to Claim 1.
4. A method of using the polyurethane elastomer of Claim 1 comprising producing a member selected from the group consisting of a roller, an elastic element and a shoe sole.
5. The elastomer of Claim 1 wherein additives are one or more members selected from the group consisting of emulsifiers, foam stabilizers, cell-size regulators, flame retardants, nucleating agents, antioxidants, internal lubricants, demolding agents, colorants, dispersing agents, pigments, reaction retarders, aging stabilizers, plasticizers, fungicides and anti bacteria agents.

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